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Puerperal Convulsions

by

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There is not probably in the whole circle of medical practice a department of more responsibility, physical and moral, than that which relates to obstetrics and the diseases of women. The wonderful variety and delicacy of the parts, their properties, and powers - their infirmities, and the necessary remedies, demand a skilfulness, that never has been too industriously sought for, and a caution that cannot be too deliberately practised. A slight incision a momentary hesitation has more than once shattered the heartstrings of connubial love, and buried in a common, and untimely grave, the fondest expectations of the father with the desolated affections of the husband.

But the fearful responsibilities of the physician do not stop here. His moral duties tho' they may not involve in their breach the lives of his patients are not the less tremendous as

regards the public or himself – In the one case, existance of the sufferer, as well as his own character for skill, must fall a sacrifice to his incapacity or neglect – In the other he strikes a death blow to female delicacy, and drags upon his own defenceless head the most aggravated dishonour, and honest indignation he deserves.

After these few preliminary observations upon the double responsibility so seldom incurred under our present system; upon a rule of acting so frequently inculcated and so constantly followed by those for whom this dissertation is prepared; I will pass on to the subject upon which I have proposed to write

The practice of obstetricks with much appearance of propriety was long exclusively confined to females; but their ignorance and incapacity, together with the increased difficulty, which the luxury and refinement of modern times has produced among

us; demanded a higher degree of skill than women have ever attained; or from the nature of their avocations are likely to arrive at – The experience of more than a century has taught us that the change has been for the better – Much fewer deaths have occurred, the labours of women generally have been of shorter duration, less painful and laborious, when attended by a skilful accoucheur; and their situation after difficult labours better

Puerperal convulsions may be considered among the most frightful and alarming diseases that attack pregnant women during gestation, or parturition – Fortunately the disease is of rare occurrence in comparison with the number of births – Why they are sometimes attendant on the gravid uterus yet remains unknown to the profession; yet they do not always steal upon us so insidiously; nor is their commencement at all times so sudden but that

we are aware of their approach. By attention to the premonitory symptoms we may know how to control and prevent them, and can rob labour of one of its greatest terrors. The immediate cause of attack is frequently unknown, and sometimes is so sudden, and fatal, that the power of art is even unable to prorastinate the fatal termination

By Mr Burns and Dr Denney alone, have I found, the disease divided into species. By this judicious arrangement the students attention is drawn more closely to the subject, and he understands the desease more clearly, than from the confused account given by Buchelogue, and Hamilton. The light they have thrown upon this subject is not sufficient to guide the student through its multifarious perplexities, but only serves to show him the apparently difficult laberinth in which he is involved. Their manner of describing and prescribing for the desease has another objection

The student frequently passes over the subject as mentioned by Burtelague and Hamilton, as too obscure, and difficult to be comprehended, or supposes the desease to be rarely met with; but the man, who from this, or any other cause neglects to acquaint himself with any thing that belongs to his profession, may pay dearly for his indolence.

Dr Dewees has with much appearance of propriety divided puerperal convulsions into three species; to each of which species he has portrayed the symptoms, and prescribed the plan of treatment, with perspicuity and clearness. By this judicious division, the young practitioner may know, to which species he is called, and the proper plan of treatment for it, without as great danger of prescribing that, which is a remedy in one species, and an evil in another.

They are divided into, first Epileptic, second Apoplectic, and third Hysterical, each of which may attack under different distinct conditions of the

uterus, by which conditions our plan of treatment must in some measure be governed

Convulsions are most generally preceded, by symptoms that indicate their approach— In the epileptic species the premonitory symptoms exist for days before the attack, and should be guarded against immediately. In this species there is a determination of blood to the head, and an engorgement of the vessels of the brain, indicated by headache of greater, or less intensity, ringing of the ears, temporary loss of vision, vertigo &c, all which symptoms are present for a longer or shorter time, before the convulsions commence. When told by a pregnant woman that she is affected as has been related, we should always bleed in quantity according to the violence of the affections, directing in addition to this proper purging, and low diet, as preventatives against this terrible invader.

Some are first attacked with pain in the stomach, and this by Dr Denman is considered a more dangerous

symptom, than when the head is the seat of the pain; but convulsion, commencing with this alarm-ing symptom are not always fatal.

"When pregnancy is instrumental to the production of convulsions, it is almost always at that period, when the uterine fibres are at their greatest stretch, and when the os uteri is disposed to dilate; or where they suffer some peculiar irritation (over which we have no controul) from the contents of the uterus; which has the same effect; and such convulsions are almost always of the epileptic species"

Dr Clark of London had occasion to introduce his hand into the uterus of a woman labouring under convulsions, and found the uterus ceased to contract during the fit, and appeared to flutter.

These convulsions differ from epilepsy not attendant on pregnancy, by not being preceded by aura epileptica

After the patient has suffered for a longer or shorter time, with the premonitory symptoms mentioned,

she is suddenly attacked with spasms, quickly following each other – The face, and eyes are twitched in a variety of directions, and with inimitable quickness – The arms, legs, and whole body, sometimes are more or less violently agitated – In some cases one side is more affected than the other; at times whilst one is much disturbed, the other is comparatively tranquil The face becomes flushed, livid, "and sometimes as black as a negro." The tongue is thrust between the teeth by which it is much bitten – Froth issues from the mouth, tinged with blood, from the wounded tongue – Respiration is hurried, and laborious, afterwards almost suspended – Great throbing of the carotid arteries, with much distention of the jugular veins, takes place – A peculiar sibilating noise is made by the mouth, resembling "a cat spitting" –

Pulse at first is full, frequent, and tense, but soon becomes rapid, small, and finally, almost

imperceptable -- The urine and faeces are sometimes discharged involuntary. A cold clammy sweat, bedews the whole body as the fit is about to subside... "The fit may last but a few minutes, or may continue with little remission for half an hour" The convulsive movements gradually subside, but never suddenly - Their force and frequency abate. Pulse becomes more distinct, and less frequent, Respiration changes to be less hurried, and stertorous. The face loses some of its lividity - The muscles are agitated, but at intervals - This agitation has been compared to an electric shock passed through the system - At length the patient sinks for an irregular period into repose, but not a natural one, The patient lies insensible, or comatose, with sterterous breathing, or loud snoring, from which state she is roused but with difficulty - If she be roused but for a moment, she quickly relapses into sleep again - This truce is of short

duration; convulsions follow convulsions without our being able to determine their cause, or period of return

Besides the symptoms that have been noted, there are others that indicate the presence of labour. There is a return of the convulsions when the pains come on, and although the patient is insensible to external occurrences, yet by her moans and restraining of respiration she shows her sensibility to uterine contraction. Dr Dewees remarks that great inclination in the patient to escape from the bed, is a pretty certain sign of labour going on. When convulsions have taken place, or in fact sometimes before the commencement, the countenance becomes swollen, especially the eyelids, and lips; even the whole body partakes more or less of this appearance. This intumescency does not immediately subside with the discontinuance of the fits, but often remains for days afterwards. Dimness of

vision, and even blindness is not unfrequent for days after the cessation of convulsions

Of the prognosis of this disease not much can be said. The longer the premonitory symptoms exist, the less the danger, and this is in proportion to the violence of the affection.

Having dwelt so fully on the epileptic species; it will not be necessary to describe the apoplectic so minutely; as nearly the same premonitory symptoms indicate its approach. It is attended by the same train of affections, but they are of shorter duration, and if possible there is a greater flow of blood to the head, and engorgement of the vessels of the brain

Apoplexy may attack during labour, or during gestation, with, or without convulsions but when labour is present, it greatly contributes to them

When apoplexy takes place during gestation the os uteri is rarely affected, but it is found sometimes

dilated, or disposed to dilate --- This species is generally attended by the sibilating noise, which always characterises the first species

In the Hysterical species, we have not all the premonitory symptoms that indicate the approach of the others - There is not intense headache, convulsed face, and vacilation of the eyes to the same extent - "There is ringing of the ears, Globus Hystericus, and palpitation of the heart." The great muscles of the back contract so that the body forms an arch, the head and heels approaching each other; when the case is violent - These affections always distinguish this species from either of the others, The face is less flushed, and there is no spitting at the mouth - The patient after the fit, can be roused and her speech becomes coherent - When her attention returns she knows not what has happened, but is frequently seized with a sense of shame, and sinks down in the bed,

endeavouring to hide her head beneath the bed-cloathes. In this species the pulse is much less disturbed, nor does it ever acquire so great a velocity, and tenuity as in the epileptic and apoplectic. Hysterical convulsions are more common during gestation than parturition.

Mr Burns after writing of the different species of convulsions observes "that convulsions of the kind I have been considering, evidently are connected with gestation, or parturition, they occur at no subsequent period, and are more frequent in first labours. They arise particularly from uterine irritation, but also seem frequently to be connected with a neglected state of the bowels."

But one case where post mortem examination of a woman dying of this disease was made, have I met with, and that is narrated by Dr Dewees. He observes "that the longitudinal sinus of the dura mater contained (by estimate) between two and three

ounces of blood; the posterior left ventricle, was filled with a bloody serum — the other ventricles appeared sound, as did the other parts of the brain — no other part was examined"

Although this is merely the examination of one case, no doubt the like appearances of extravasation of blood, and serum within the brain would be found in all.

Treatment — What should be done when the premonitory symptoms indicate the approach of convulsions has already been mentioned — In the treatment of the epileptic species, the detraction of blood is indispensable; without it all other efforts will prove abortive — The operation of cathartics, or any other mode of depletion is too slow to preserve life, or even to prehome a fatal termination of the disease — Besides by bleeding we expedite, and better ensure the effects of cathartics, and

other remedies. The bleeding should not be done timorously, or sparingly. We must bleed "again and again" until the symptoms are mitigated, or the disease subdued; and the operation must be repeated as long as the fits continue to occur, or the system to indicate the repetition of them. More injury has resulted from not detracting sufficient blood, than from taking too much. There is great authority for detracting immense quantities of blood, more than we could theoretically suppose one person could bear the loss of. The arm is generally chosen to bleed from as it is more convenient, and will answer as well in most cases as any part that can be selected. The external jugular vein, and temporal artery have had the preference given to them by some, and in many cases, perhaps when practicable, it would be best to bleed from the jugular vein. To this there are some objections. The recumbent posture, and the

agitation the patient is affected with, frequently makes it difficult to operate - The objection to bleeding from the temporal artery is, that sufficient blood cannot be drawn from it; the artery being liable to contract too soon after being divided. It should be borne in mind by the practitioner that blood should be drawn from a large orifice; as it is an established maxim, that when blood is detracted rapidly, a much less quantity will suffice, and the effect on the system is always more decisive. Besides venesection, cupping is useful to apply to the temples - It detracts blood more immediately from the part most suffering - In addition to bleeding, cathartics must be administered by the mouth, when the patient can swallow - Dr Ewel of Washington city considers calomel the most efficacious - This appears in some measure to possess the properties of an antispasmodic, besides being cathartic, and I should suppose would

be most useful in those cases where the affection of the stomach, was one of the premonitory symptoms. Dr Ewel recommends it highly in large doses, and it has been prescribed by my preceptor with great apparent advantage in several cases. Enemata are important auxiliaries to the remedies mentioned, and in very many cases may be used when cathartics cannot be swallowed. They expedite the operation of cathartics, and more effectually cleanse the rectum. A strong infusion of senna, is one of the best and, I persuade, is the only enema used by Dr Dewees in his list of cases. An injection of 12 or 15 grs of Tart: Emet: is valuable in the treatment of this disease. Blisters are also very valuable, when there is time for their effects. They are useful anywhere, but most so when applied to the head, or back of the neck. A blister when applied to the back of the neck in affections of the head frequently affords

astonishing relief – Cold applications to the head by means of bladders filled with cold water, ice and water, or by means of cold water poured from a small distance above the head upon it The bladder of the patient must also be attended to and emptied if necessary by the catheter of its contents – A neglect of this, Mr Burns observes, of itself is sometimes the cause of disease Of the giving of Ergot, Dr Hearns, of New York, who first called the attention of physicians of this country to the medicinal properties of Ergot, observes in his directions for the exhibition of it. "When the pains are transferred from the uterus to the other parts of the body, or to the whole muscular system, producing general puerperal convulsions. After premising copious blood letting, the Ergot concentrates all those misplaced labour pains upon the uterus, which it soon restores to its appropriate action, and the convulsions imme-

-diately cease"

Of Delivery - Decision on this point is important. Mr Burns observes that the patient is suffering from a disease connected with the state of the uterus, and that state is to be gotten rid of, by terminating the labour - Even when convulsions take place very early in labour, the os uteri is generally open to a certain degree, and the detraction of blood which has been resorted to, on the first attack of the disease renders the os uteri usually lax and dilatable - Convulsions may attack a woman when she has not yet arrived at the time for parturition, and there is no evidence that she is in labour, in that situation it would not be correct to produce delivery - The os uteri is not found in all cases dilated or disposed to dilate, and the forcible distending it, is in no case advisable under any circumstances Although the fits are caused by the

contents of the uterus, the getting rid of them by violence will not better the situation of the patient— Much injury and even death has resulted from forcibly distending the os uteri when there has been no danger existing, as a pretext for so doing; and much more dangerous an operation of this kind would be during the existance of convulsions—

In the apoplectic species we must pursue the plan of treatment detailed for the epileptic, but to a greater extent, To use the words of Dr Dewees. we must bleed until the pulse flutter beneath the fingers, as there is greater danger of extravasation of blood within the brain—

In the Hysterical species a somewhat different mode of treatment is to be pursued. When the symptoms are violent blood letting should precede other remedies, the quantity being in proportion to the violence of the affection.

After venesection, antispasmodics are to be employed. Laudanum may be given in proportion to the violence of the affection, to which one, or two teaspoonsfull of asafoetida in some convenient vehicle. In this species laudanum has not the same objection to its use, as in the other species. When it cannot be taken by the mouth it may be given by injection, the dose in that case being three times as large.

I shall conclude my thesis by transcribing three cases that occured, in my fathers, and preceptors practice, as they differ in some particulars from those mentioned by Dr Dewees.

Case 1st Feb 24th 1826 I was requested to visit Mrs R P. pregnant with her first child, arrived about 12 o'clock at night, found her in strong convulsions. Bled her 20 oz and gave 20 grs of calomel She was unable to answer correctly. At intervals not exceeding half an hour she was violently

convulsed — no dilatation of the os uteri — By 12 O'clock next day she had lost 80 oz of blood, and had no appearance of labour — Gave her one scruple of Ergot rubbed to a powder and dissolved in one ounce of boiling water — The convulsions were suspended for an hour or more and labour pains came on — The breech presented — The fits again returned, and were very violent until she was delivered, which was in about 2 hours. The child was dead — By the use of blisters and the usual remedies she recovered — I am inclined to think the Ergot had some agency in suspending the epilepsy, during the time she remained free from its attacks - - -

2nd Augt 26th 1826. Mrs. M. R was delivered of her first child, a male, after a labour of ordinary severity, and of about 3 hours continuance — Her age 19 — her stature short — She was much swollen in her face, and neck previous to delivery —

nothing unpleasant occurred for 22 hours after her confinement – I was then sent for and found her suffering most excruciating pain in the stomach – The nurse had given her 35 drops of laudanum before I saw her – Under the impression that the disease was colic from wind, I directed its exhibition every half hour until ease should be procured – On the morning of the 28th she became more easy and slept some, but soon began to complain of pain in her head, and at 6 O'Clock had an epileptic fit – Bled her 40 oz at 2 bleedings, applied cold to the head, and gave her 30 grs of calomel in two doses after an interval of 4 hours. Blistered her forehead, and back of the neck, and directed an injection of Tart: Emet: By long continued course of depletion the convulsions were subdued, and she recovered – I am convinced that the laudanum was injurious, and that the commencement of the pain in the stomach was

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nothing but epilepsy misplaced.

3rd Sept 24th 1826 Was requested to visit Mrs R. a robust woman of 30 years of age in the ninth month of pregnancy – She was often a severe day's labour taken with a chill – Its subsidence left her with a high fever, and intense pain in the head as her pulse was full, and strong bled her 20 oz, and enjoined rest for the night – Was sent for in haste in the morning – Found the alarming symptoms much increased, constantly attempting to get out of bed – Eyes very red, eyelids, and lips much swollen, subsultus tendinum, and great pain in the head – Enquired if any thing stimulating had been given her, and learnt that two teaspoonsfull of E Paregoric had been given to her by her friend, without my knowledge, or advice – Bled her three times during the course of the day, but could not procure any female friend who would consent to remain with

her owing to her bad character, and the society about her – No medicine was given but a dose of calomel and Jalap which was rejected her stomach being very sick – A blister was applied to the forehead After the third bleeding in the evening she became more sensible, and said her head ached much, and that it was impossible to keep her hands and feet from twitching – She expired about 8 Oclock next morning – No symptoms of labour appeared, and her infant perished with her – I believe she was injured even by the small quantity of opium contained in the E Paregoric that was taken by her